



GATE-LOK

USERS MANUAL



**GRIFFIN
ARMAMENT**

MULTIPLE PATENTS PENDING
THIS MANUAL APPLIES TO THE 30SD-K™ & M4SD-II/K/L™ SUPPRESSORS

GATE-LOK

INSTALLATION & MAINTENANCE GUIDE

**FAILURE TO READ AND UNDERSTAND THIS MANUAL
PRIOR TO USE MAY RESULT IN INJURY OR DAMAGE**

DISCLAIMER

Griffin is not responsible for any resulting damage from improper or abusive use. Firearms and their accessories can be dangerous if not handled correctly, and it is the user's own responsibility to understand this manual and product for safe operation. If there are any unanswered questions, Griffin's experienced customer service team will gladly assist at (262)-200-0003.

Still have questions? "Griffin Armament 30SD-K Tabletop Tutorial"
<https://vimeo.com/360596821>



MAXIMUM RECOMMENDED RATE OF FIRE:

Semi-automatic or burst fire should be used, except in emergencies. Never subject the suppressor to more than three 30 round magazines of continuous automatic fire. In the event of 90 round continuous automatic fire, allow the unit to cool prior to resuming fire if the situation permits. Up to 15 rounds per minute of continual fire is acceptable.*

*In company internal testing, we fired 90 rounds of full auto followed by 28 rounds per minute for 10 minutes on 11.5" barrel without damaging the suppressor. This is extraordinary testing and should give you an idea of experience capable in an emergency that should not be considered normal use. Extraordinary circumstances will severely reduce suppressor life spans.

Water quenching of the suppressor should be reserved for emergencies requiring rapid removal. This operation should only be conducted with the bolt closed to prevent scalding water from spraying through the barrel and burning the operator. Water quenching may warp the suppressor, rendering it unserviceable.

PRODUCT SYNOPSIS

Unique to Griffin GATE-LOK™ family suppressors is the mounting interface. The mounting system is one of the fastest on the market and accommodates the A2 nato compensator as well as Griffin's proprietary performance rich muzzle device options. Additionally, the GATE-LOK™ mounting system does not suffer from the wear prone issues of ratcheting systems common to the marketplace. Our mounting system was designed to provide trouble-free use. GATE-LOK™ suppressor mounts are precision ground to six ten thousandths of an inch for minimal, repeatable, and completely dependable point of impact shift. Speed and durability are hallmarks of the GATE-LOK™ suppressors.

MUZZLE DEVICE SELECTION



The **Hammer Comp** provides 2 sacrificial baffles that reduce recoil and ensure maximum service life of your suppressor. Slotted compensating features provide tuned muzzle stability. CNC machined from a solid bar of heat treated 17-4ph stainless steel, the Gate-Lok Hammer Comp is built to last.



The **Closed Tine Flash Suppressor** was designed for a military service branch. It provides improved flash suppression and rise compensation vs the A2 flash suppressor, especially on short barrels, and retains Bayonet, Bore sight collimator, and blank firing adapter functionality. This product was developed as a Bayonet compatible mount for our Gate-Lok suppressors.



The **2.25" Stealth Flash Hider** provides optimal suppressor fit, enhanced flash signature reduction, and reduces muzzle climb. Time intensive R&D resulted in a high performance 3 prong flash hider with incredible resonance reduction. These hide flash extremely well and do not ring or ping when fired.



The **Flash Comp** optimally combines the functions of three traditionally separate classes of devices - Muzzle Brakes, Tactical Compensators, and Flash Suppressors. The Gate-Lok Flash Comp achieved a perfect 5 out of 5 in National Tactical Officers Association testing to achieve the rare, coveted, NTOA Gold seal of approval granted to devices which achieve perfect evaluations.



The **Flash Comp .30CAL (7.62mm)** provides high performance mounting options for Griffin Gate-Lok Silencers as well as a 30 caliber (7.62mm) interface for the QD Blast Shield. The Flash Comp was made with the same performance features as its 5.56mm counterpart but with a 5/8x24 threaded interface and integral overtravel stop.

M4SD-K

Weight: 15.5 ounces
Length: 6.0"
OD: 1.5"



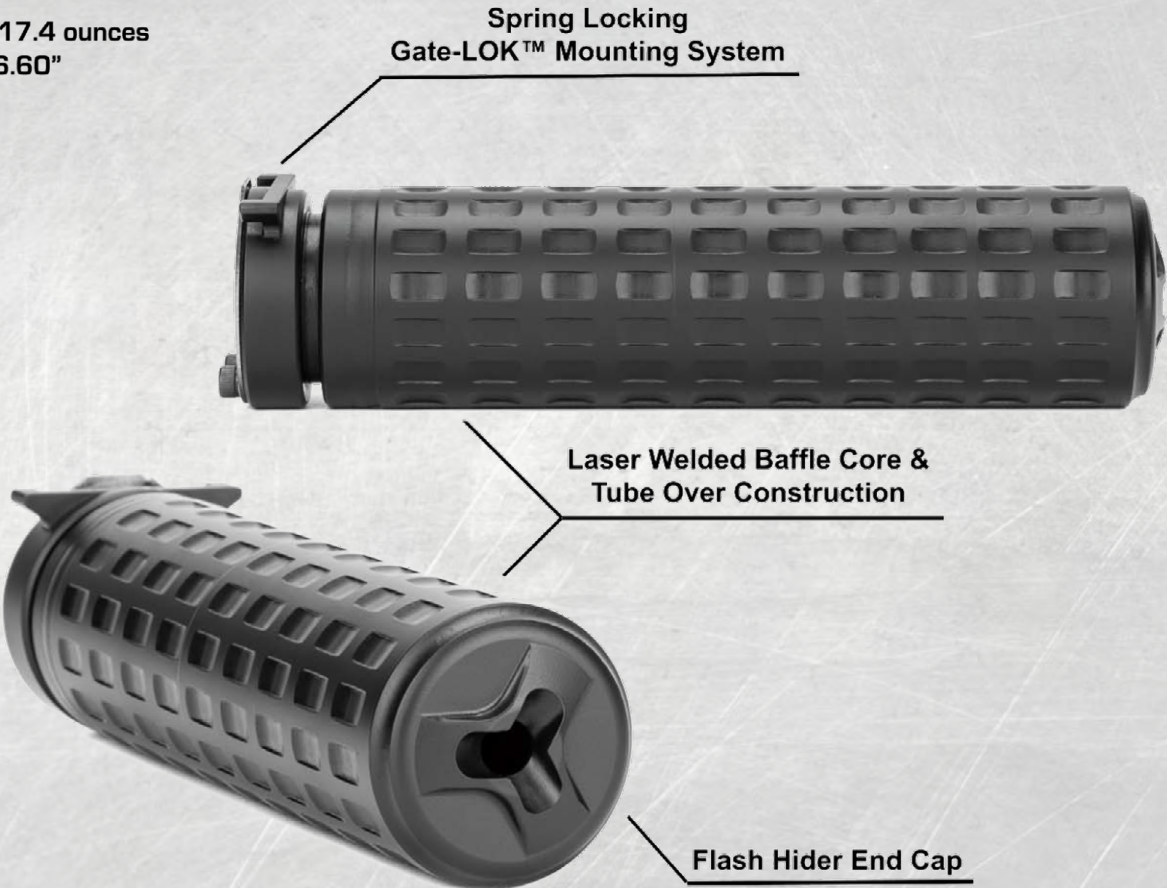
Available Flash Hider Muzzle Devices:

Gate-LOK™ Hammer Comp (included)



M4SD II

Weight : 17.4 ounces
Length : 6.60"
OD : 1.5"



Available Flash Hider Muzzle Devices :

Gate-LOK™ Close Tine Flash Hider (shown)



30SD-K

Weight : 17.8 ounces
Length : 6.60"
OD : 1.5"



Available Flash Hider Muzzle Devices :
Gate-LOK™ Close Tine Flash Hider (shown)



M4SD-L

Weight : 14.5 ounces
Length : 6.50"
OD : 1.5"



Available Flash Hider Muzzle Devices :
Gate-LOK™ Close Tine Flash Hider (shown)



RECOMMENDED TOOL KIT

The recommended tool kit for Griffin's GATE-LOK™ products consist of Suppressor Alignment Check Rods and 3/4" Maintenance Pipe Brushes. All of these products along with other great accessories can also be found on our website:

<https://www.griffinarmament.com/silencers-accessories/accessories/silencer-maintenance/>

Additional silencer accessories that apply to our other products can also be found on our website at:

<https://www.griffinarmament.com/silencer-accessories/additional-silencer-accessories/>

These products are armorer gauges and end user tools to provide users with a satisfactory shooting experience. The brushes are needed to efficiently clean the internal bore of the mounting system and corresponding taper and threads. Alignment rods are critical gauges to use when mounting a suppressor to a host firearm for the first time. This precision ground gauge will show the user if the suppressor and host are properly aligned. Refer to page 13 for details.



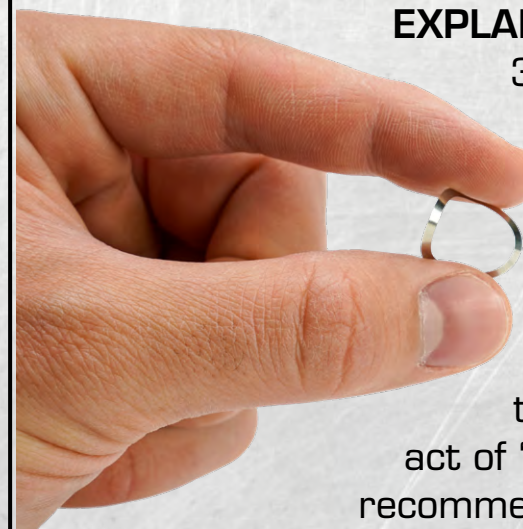
ALWAYS REMOVE THE MAGAZINE FROM THE FIREARM AND CLEAR THE CHAMBER BEFORE PERFORMING ANY MAINTENANCE OPERATION

MUZZLE DEVICE MOUNTING

A preset or objective needle style torque wrench is required to set accurate torque. Precision stainless shims are provided. A 3/4" open ended crowfoot wrench is ideal. Griffin armorer tools have also been designed around these procedures and are available at www.GriffinArmament.com. The supplied muzzle device is a stainless tool steel material and very hard, but care should be taken when applying torque to not mar the finish or wrench flat edges.

EXPLANATION OF MUZZLE DEVICE TIMING:

3 prong flash suppressors may be desired to direct one of three ports upwards toward the front sight post. This will mitigate dust signature when firing prone in dry conditions. The Closed Tine Flash Suppressor is a compensator wherein the closed area should point downward toward the magazine well, permitting exhaust gas to be redirected upwards to counter muzzle rise. The act of "timing" is deriving desired axial position inside the recommended torque range.



(Figure 1)

REQUIRED TOOL KIT



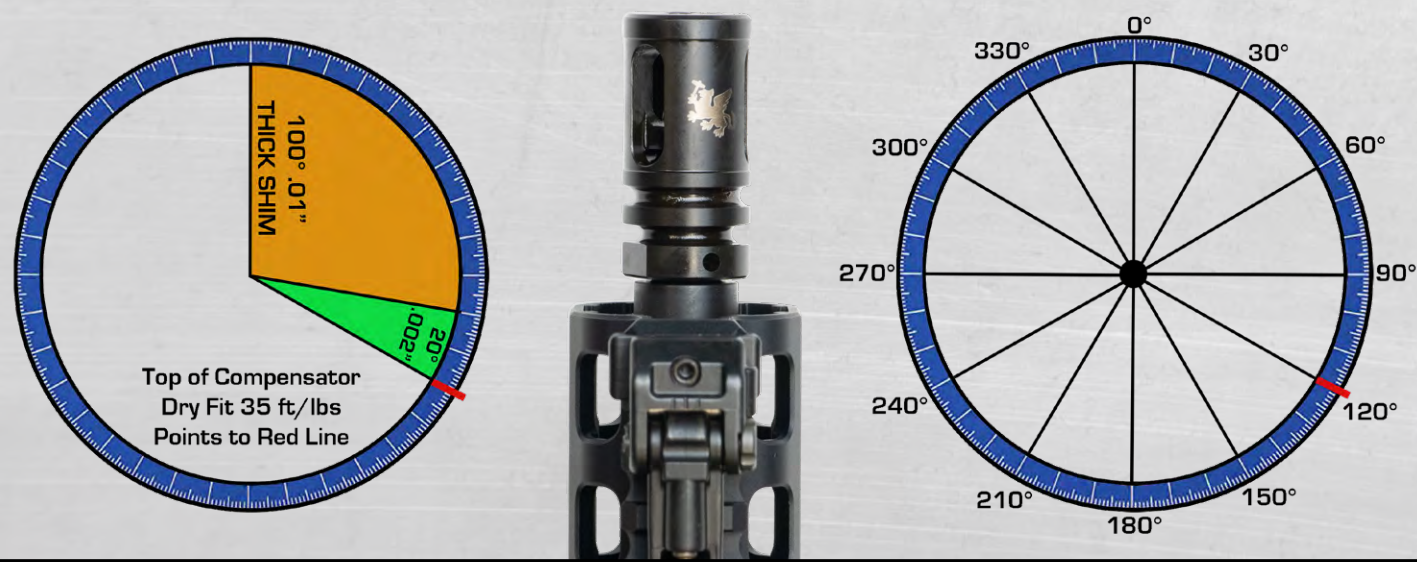
MOUNTING THE MUZZLE DEVICE

Clear your firearm in accordance with manufacturer guidance. Prepare to dry fit your muzzle device. Clean the muzzle threads and face with a brass brush. Dry fit the muzzle device and torque to 35 ft/lbs. Measure the rotational degrees required to align the firearm. Refer to example below.

EXAMPLE: Your muzzle device was dry fitted and torqued to 35 ft/lbs (30-45 ft/lbs is ~12° of radial range) without the use of shims and is near the 3:30 clock position, or 120° when measured (see below). For this you will need one thick shim (measured at .01”) and one thin shim (.002”) to time the top of the muzzle device to the 12 o'clock position. 100° of rotation is equal to .01” while .002” is equal to 20° of rotation. Thin shims are more narrow and will easily flex in your fingers (see Figure 1 on page 5). **DO NOT USE BLACK CRUSH WASHERS** with your silencer as these will cause baffle strikes.

Lastly, while using a calibrated 3/8” drive torque or needle type wrench and a 3/4” open-ended wrench, tighten your muzzle device into the 12 o'clock position ensuring you achieve 30-45 ft/lbs of torque. Add or delete shims as needed to achieve proper timing and torque. This may take several minutes. **Check that your barrel thread shoulder is in contact with the rear of the muzzle device.** Alignment is derived by these surfaces contacting. If these surfaces are not in contact, you may need to rotate 360° with shims (add 3 thick shims and 3 thin shims). The objective of the mounting exercise is to achieve proper orientation with the minimum number of shims and thread shoulder to rear face contact.

EXAMPLE



FAILURE TO UNLOCK THE MOUNT BEFORE INSTALL WILL CAUSE DAMAGE TO THE SYSTEM

MOUNTING THE SUPPRESSOR

FIG 1

FIG 2

FIG 3

FIG 4

FIG 5

FIG 6

1) Use thumb to minimally deflect spring plate rearward on suppressor (fig 1).

2) Lift locking gate (fig 2).

3) Tilt the silencer and firearm, such that gravity assists keeping the gate open (fig 3).

4) Pull the silencer into contact with the shoulder of the mount.

5) Depress the gate and push the silencer away from the rifle to engage the groove and close the gate parallel to the mount's rotation limiting wrench flats (fig 4).

6) Attempt to rotate the suppressor back and forth. Two distinct and close rotational limits should be felt with a slightly audible click. This indicates the silencer is correctly mounted (fig 5). In the event rotational stops are not felt, the mounting process failure will look like fig 6. The open spring plate and rotating suppressor indicates the suppressor is not safe to fire. **Firing the suppressor with the gate unlocked will eject the suppressor and may damage the suppressor and/or cause additional recoil to occur.**

DISMOUNTING THE SUPPRESSOR

- 1) Allow suppressor to cool to ambient temperature.
- 2) Minimally depress spring plate rearward (fig 1).
- 3) Lift latch and tilt the rifle to allow gravity to maintain gate in an open position (fig 2).
- 4) Twist and pull silencer off and away (fig 3).
- 5) Close the gate for storage of the suppressor to prevent component damage (refer to "CLOSED" image).

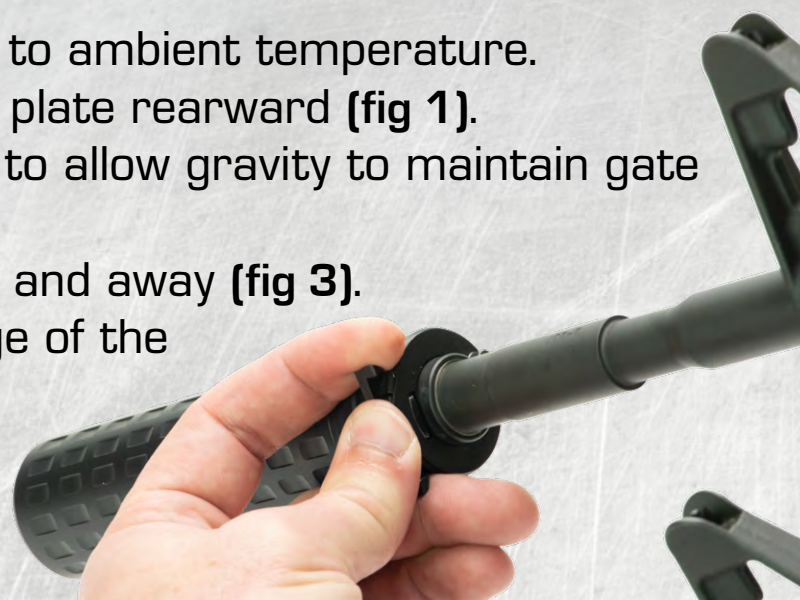


FIG 1



FIG 2



FIG 3



OPEN



CLOSED

STILL HAVE QUESTIONS?

Search YouTube or Vimeo for "Griffin Armament SDQD Silencer Install and Maintenance Tutorial" video.



IMPROPER ALIGNMENT CAN CAUSE PERMANENT DAMAGE TO YOUR SUPPRESSOR

CONFIRM ALIGNMENT BEFORE INITIAL USE

Immediately after mounting the muzzle device with a shim set, firmly attach the silencer in the **UNLOCKED** position to the installed muzzle device. Look down the silencer bore through the barrel, illuminating the bore with light. White paper in the breach can be helpful as a reflective surface. Confirm visual alignment by ensuring the bore of the silencer is in the center of the firearms barrel. Gunsmiths can provide this service, or you can use a Suppressor Alignment Check Rod, which can be found on our website for an easier confirmation at

www.griffinarmament.com/suppressor-alignment-check-rod/



PERFECT



ACCEPTABLE



MISALIGNED

Check rods are the most accurate and safe tool for assuring your silencer has a safely shootable bore condition. Installation and use of this tool is simple and should prevent baffle strikes or any unexpected issues once you get to the range.

These rods can be bent very easily, however, and must be handled with extreme care in order to remain useful. Store on a flat supportive surface in a dry climate.

HOW TO USE SUPPRESSOR ALIGNMENT CHECK RODS:

- Properly mount your silencer to the host firearm.
- Insert check rod down bore of the silencer and into the host firearm bore until the end of the rod is flush with the end cap.
- Observe alignment and confirm rod is positioned near the center of the silencer bore (refer to images above).
- Host firearm may need to be rotated around bore to confirm alignment due to tolerance between the bore and check rod.
- If the mount and silencer are in alignment, the rod will not touch the suppressor.
- **Remove the rod before shooting!**
- If the rod is touching, contact maintenance for trouble shooting.

FIRST ROUND FLASH ELIMINATION - DUTY APPLICATIONS ONLY

There are two methods Griffin recommends for wetting your suppressor to eliminate 1st round muzzle flash. The first method would be to detach the suppressor and rotate at a 45 degree angle while pouring 5cc's of water slowly into the mount interface. Ensure the bores are drained of all excess water. Then mount the suppressor. **DRAINING EXCESS WATER** is critical to ensure that water does not seep back into the bore causing potential barrel damage. The second method is to submerge your suppressor entirely detached from host firearm. Shake the suppressor vertically multiple times to allow excess water to drain, end cap up. From here, simply install the suppressor and fire as normal. Accuracy and point-of-impact shift should be completely unaffected.

CLEANING THE SUPPRESSOR

Clean the mount interface of the silencer after every use to prevent your suppressor from becoming stuck on the muzzle device. Remove excess carbon from the muzzle device OD with a fine wire brush or wheel. No other maintenance is required with this silencer. An Oatey 3/4" pipe cleaning brush can be used to clean the inside mount interface of the suppressor. **DO NOT USE** course or medium wire wheels or brushes, as this can cause damage to your mount.



MAXIMUM RECOMMENDED RATE OF FIRE:

Semi-automatic or burst fire should be used, except in emergencies. Never subject the suppressor to more than three 30 round magazines of continuous automatic fire. In the event of 90 round continuous automatic fire, allow the unit to cool prior to resuming fire if the situation permits. Up to 15 rounds per minute of continual fire is acceptable.

WARRANTY STATEMENT

PRODUCT LIFETIME LIMITED WARRANTY

Subject to the limitations outlined below, Griffin Armament will repair or replace free of charge any product we manufacture for the duration of this lifetime warranty. This warranty is unlimited in duration and covers at Griffin Armament's sole discretion, service, repair, and/or replacement of damaged products caused by normal use. Any repair not covered by the warranty will be billed at a maximum of 30% of current MSRP for a comparable product, subject to BATFE transfer fees as required.

LIMITATIONS

Griffin Armament's warranty does not cover loss, normal wear, damage to our product or the host weapon system resulting in whole or in part from abusive or negligent use, unauthorized modification, improperly threaded barrels, improperly mounted suppressors, improperly loaded or re-loaded ammunition, or neglect. Finish wear is cosmetic and is not covered by this warranty. Any repairs to the unit made necessary by the above mentioned factors may be invoiced to the owner at a maximum of 30% of current MSRP for the most comparable product. The individual barrel lengths and calibers warranted are listed in the manual you receive with your product, or on the product page (applicable only to the most current model of the respective product). In all cases refer to the product manual for product limitations prior to using a Griffin Armament product. Warranty is subject to change without notice.

To learn more about Griffin Armament® and the kit we provide, please visit us on the web at www.GriffinArmament.com or keep track of our social media pages:

Instagram



Facebook



YouTube



Rumble





CS@GRIFFINARMAMENT.COM

(262)200-0003

Watertown, WI 53094

**GRIFFIN
GENERAL
ISSUE**

PROGRAM



**GRIFFIN
ARMAMENT**

